

From: <vcpl.judy@vetmed.wsu.edu>  
 To: <acook@sktc.net>  
 Cc: <vcpl.judy@vetmed.wsu.edu>  
 Sent: Friday, March 21, 2014 10:50 AM  
 Subject: MDR1 Genotyping Results for Teddy

× Washington State University

## MDR1 GENOTYPING RESULTS

3/21/2014  
 MDR1 - 39926

Identification Number:

Submission Type: Brush

Dog Name: Teddy

Dog Breed: Collie

Test Result: **Normal/Normal**

### Explanation of test results

#### Normal/Normal

These dogs do not carry the mutation, and will not pass on the mutation to their offspring. These dogs would not be expected to experience unexpected adverse drug reactions to normal doses of ivermectin, loperamide (Imodium®), and some anticancer drugs.

#### Mutant/Mutant

These dogs carry the mutation and can not pass on a normal gene to their offspring. These dogs would be expected to experience toxicity after normal doses of loperamide (Imodium®), some anticancer drugs, and high doses of ivermectin (greater than 50 micrograms per kilogram).

#### Mutant/Normal

These dogs carry the mutation and may pass on the mutant gene to their offspring. These dogs may experience toxicity after normal doses of loperamide (Imodium®), some anticancer drugs, and high doses of ivermectin (greater than 50 micrograms per kilogram).

A current list of problem drugs for dogs with the MDR1 mutation may be found at this web address:  
<http://www.vetmed.wsu.edu/VCPL>

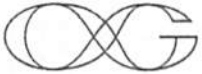
### *Neal Burke*

**Neal Burke**  
**Veterinary Clinical Pharmacology Laboratory Manager**

\* PCR for this service is performed pursuant to an agreement with Roche Molecular Systems, Inc. US Patent Number US 6,790,621 B2. Foreign patents pending for MDR1 testing.

PO Box 609, Pullman, WA 99163-0609

3/21/2014



**Test Report**



Optigen Accession #: 13-1274  
Report issued for: **Teddy**

*OptiGen Test Certificate*

**Optigen Accession #: 13-1274**

**Test Completed: 02/14/2013  
Report Issued: 02/15/2013**

Test Performed: **CEA/CH test**

**Result: Normal  
Sample Type: Blood**

Registered Name: **Van-M Pop The Question**

**Reg#: DN32551301**

Breed: **Collie**

**ID#: 11Q4E1**

Sex: **Male**

Date of Birth: **December 21, 2011**

Owner(s):

**Aimee A Cook**



*Susan Reasor Kelling*  
**OptiGen Authorized Signature**

[www.optigen.com](http://www.optigen.com)

**Test Results:** Genotype of your dog is **NORMAL/CLEAR**.  
**Risk for developing Collie Eye Anomaly/Choroidal Hypoplasia (CEA/CH):** This dog will never develop CEA/CH.  
**Significance for breeding:** This dog can be bred to any mate and will produce no pups affected with CEA/CH.

This interpretation is based on the test result of the DNA test for the specific mutation identified as causing CEA/CH in Collies as of the date on this report.

For further information, please consult the OptiGen website at [www.optigen.com](http://www.optigen.com). Note: The use of this test is patent protected and licensed to OptiGen. See [http://www.optigen.com/opt9\\_patent.html](http://www.optigen.com/opt9_patent.html) for details.

**International DNA Based Genetic Database:** To register this result with OFA, make a copy, sign below, mail WITH FEE, to OFA, 2300 E. Nifong Blvd, Columbia, MO 65201-3856 or FAX to 573-875-5073. [www.offa.org](http://www.offa.org)  
I hereby certify that the sample submitted was of the animal described on this application. I authorize the OFA to release all information on the test results thus placing the results in the public domain and I hereby release OFA from any and all liability associated with the release of test information.

Signature of owner or authorized representative: \_\_\_\_\_

**Cornell Business & Technology Park**

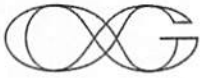
tel: 607.257.0301

fax: 607.257.0353

767 Warren Road, Suite 300, Ithaca, NY 14850

email: [genetest@optigen.com](mailto:genetest@optigen.com)

web: [www.optigen.com](http://www.optigen.com)



**Test Report**



Optigen Accession #: 13-1274  
Report issued for: **Teddy**

**OptiGen Test Certificate**

**Optigen Accession #: 13-1274**

**Test Completed: 02/15/2013**  
**Report Issued: 02/18/2013**

**Test Performed: Rod-Cone Dysplasia Type 2**

**Result: Normal**  
**Sample Type: Blood**

**Registered Name: Van-M Pop The Question**

**Reg#: DN32551301**

**Breed: Collie**

**ID#: 11Q4E1**

**Sex: Male**

**Date of Birth: December 21, 2011**

**Owner(s):**

**Aimee A Cook**



*Susan Pease Kelling*  
**OptiGen Authorized Signature**

[www.optigen.com](http://www.optigen.com)

Test Results: Genotype of Dog tested is Normal

Risk for developing rcd2 form of PRA: Will never develop rcd2 form of PRA.

Significance for breeding: Can be bred to any dog and will produce no pups affected by rcd2 form of PRA.

This interpretation is based on the test result of the DNA test for the specific mutation identified as causing the rcd2 form of PRA in Collies as of the date on this report.

For further information, please visit OptiGen's website at [www.optigen.com](http://www.optigen.com).

**International DNA Based Genetic Database:** To register this result with OFA, make a copy, sign below, mail WITH FEE, to OFA, 2300 E. Nifong Blvd, Columbia, MO 65201-3856 or FAX to 573-875-5073. [www.offa.org](http://www.offa.org)

I hereby certify that the sample submitted was of the animal described on this application. I authorize the OFA to release all information on the test results thus placing the results in the public domain and I hereby release OFA from any and all liability associated with the release of test information.

Signature of owner or authorized representative: \_\_\_\_\_

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tel: 607.257.0301

fax: 607.257.0353